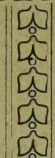
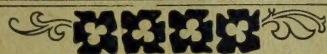


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CATALOGUE



Frederick Nursery

ESTABLISHED 1879.

Fruit and Ornamental Trees,

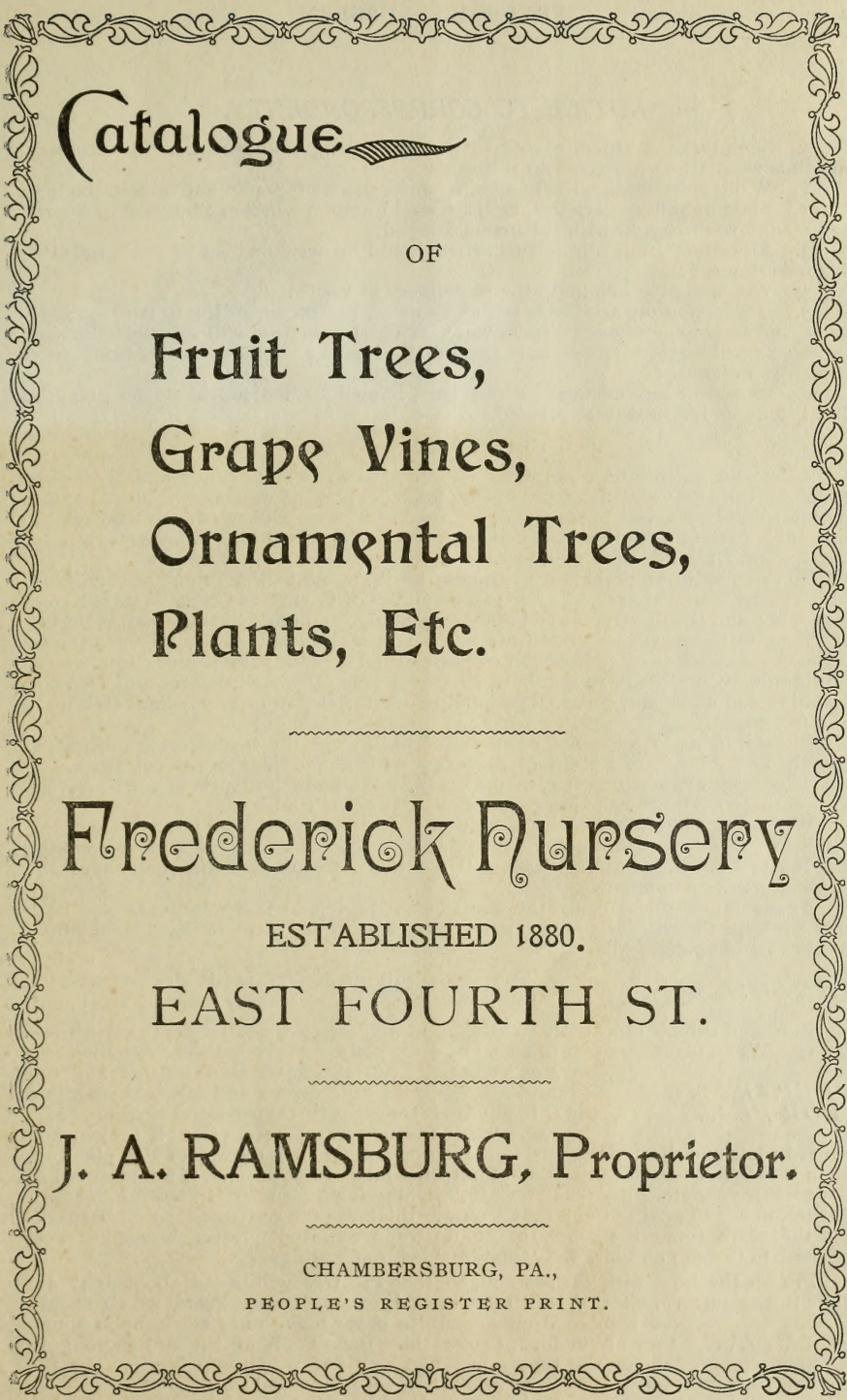
Grape Vines, Plants, Etc.

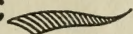
J. A. RAMSBURG, Proprietor.

FREDERICK, MD.

CHESAPEAKE & POTOMAC TELEPHONE NO. 413

FREDERICK CO. TELEPHONE NO. 147.



Catalogue 

OF

Fruit Trees,
Grape Vines,
Ornamental Trees,
Plants, Etc.

Frederick Nursery

ESTABLISHED 1880.

EAST FOURTH ST.

J. A. RAMSBURG, Proprietor.

CHAMBERSBURG, PA.,

PEOPLE'S REGISTER PRINT.

NOTICE TO CORRESPONDENTS.

1. Send in your orders early, particularly if long transportation is necessary, and thus we shall be prepared to ship early.
2. Write your orders plainly on a separate sheet of paper, and not in body of letter. State definitely varieties, age, size and number, whether Standard or Dwarf, and route by which you wish the goods shipped.
3. All orders from unknown parties should be accompanied by cash, or satisfactory reference.
4. We guarantee safe and prompt delivery of goods.
5. If selection of varieties is left to us we will select according to our best judgment and long experience. Where varieties are specified we will substitute for such as we may not have, kinds equally good and ripening at the same season, unless otherwise ordered.
6. In case of any mistake on our part, immediate notice should be given, so that it may be rectified or explained.

REMARKS.

This catalogue has been prepared with great care. The selection of varieties embraces all the latest and most promising introductions, as well as the most popular and thoroughly proved old sorts. It will, we think, form a most efficient and competent guide to the professional or amateur, in the selection of the choicest fruits for the Garden, Orchard, Park or Lawn.

To the planter or purchaser of nursery stock, at least three things are indispensable: first, varieties true to name; second, healthy, vigorous, well matured trees or plants; and third, careful and judicious packing, without which all may be lost.

We give the most careful scrutiny to the propagation of varieties, endeavoring by all methods known to us, to protect ourselves from error or imposition, and rejecting anything of which we have reason to feel suspicious. By such careful and constant watching and attention, we are warranted in offering our stock as pure and absolutely true to name.

Our soil being of a character best suited to produce the healthiest conditions of growth, that solid, firm texture of the wood with abundant fibrous roots, so necessary to successful transplanting, we are enabled to offer the products of our Nurseries, with entire confidence to planters in all sections of the country.

We aim to keep fully abreast of an enlightened and cultivated taste, in the introduction of new and valuable varieties of fruits—accepting with pleasure everything that has real merit, we shall, with equal readiness, discard and discountenance the sale of worthless humbugs.

By careful consideration of the wants of our trade and faithful attention to business, we hope to continue to merit and receive a share of the patronage of the lovers and buyers of choice fruits.

THE SOIL A rich loam is the best for fruit, made sufficiently dry by artificial draining, but all soils may be made available by judicious treatment.

Plow and subsoil repeatedly so as to thoroughly pulverize to a depth of 12 to 18 inches. When planting upon the lawn or grass plots, remove the sod for a diameter of 4 or 5 feet and keep this space well worked and free from weeds. Dig the hole deeper and larger than necessary, to admit all the roots in their natural position, keeping the surface and subsoil separate. Cut off broken and

PREPARATION FOR PLANTING. bruised roots and shorten the tops to half a dozen good buds except for Fall planting, when it is better to defer top pruning until the following Spring. If not prepared to plant when your stock arrives, "heel in," by digging a trench deep enough to admit all the roots, and setting the trees therein as thick as they can stand, carefully packing the earth about the roots, taking up when required. Never leave the roots exposed to the sun and air, and "puddle" before planting.

Fill up the hole with surface soil, so that the tree will stand about as it did when in the nursery, after the earth has settled, except Dwarf Pears, which should

PLANTING. be planted deep enough to cover the quince stock, upon which they are budded, two or three inches. Work the soil thoroughly among the roots and when well covered tramp firmly. Set the tree firm as a post, but leave the surface filling (of poorer soil) light and loose. No staking will be required except with very tall trees. Never let manure come in contact with the roots.

A covering of course manure, straw, marsh hay, or loose chip dirt, during the first season, will effectually prevent injury from drouth and is a benefit at all times.

MULCHING. If stock is frozen when received, place the package in a cellar and entirely bury in sand until frost is removed. If dried from long exposure bury in the ground or keep in water until the shrivelled appearance disappears.

The practice of procuring supplies of trees in the Fall is becoming more and more general as each season demonstrates its wisdom. It is a more favorable time than Spring, because of the colder weather, and the lighter pressure with nursery-men, the freighting companies and the planter. Even when Fall planting is not desirable by reason of the severity of the climate, the stock may be procured in the

HOW TO WINTER

TREES PROCURED

IN THE FALL.

and thus be on hand ready for the opportune moment in the Spring. To insure success you have only to get the trees before freezing weather, and bury them in the following manner: Choose a dry spot where no water will stand during the Winter, and with no grass near it to invite mice. Dig a trench, throwing out enough dirt to admit one layer of roots below the surface, and place the trees in it, inclined to an angle of forty five degrees or more. Widen the trench, throwing the soil among the roots in position; place another layer in the trench, reclining the tops on the others, and so on until all are in the trench; then finish by throwing up more soil until the tops of the trees are nearly or quite covered. It is also well to bank up the earth around the sides to insure more thorough protection. The exposed tops should then be covered with pine boughs, which insures them against any possibility of injury. Care should be taken to fill solid all the interstices among the roots. In the Spring the roots will be found to have formed the granulation necessary to the production of new spongiosoles and when planted at the proper time will start to immediate growth.

If the trees are frozen when received, they should be buried immediately in the earth, tops and all, and allowed to thaw in this condition.

We cannot too strongly recommend to our customers the procuring of young trees, especially for orchard planting, instead of selecting the largest that can be had,

PLANT YOUNG TREES.

to secure a more immediate effect. They can be taken up with more perfect roots, and will sooner become established in a new location. They can also be more readily trained to any desired shape. The largest and most successful planters invariably select young, thrifty trees, as the surest in the end to give thorough satisfaction.

A great mistake is made by most fruit growers in their manner of buying trees. The farmer who would not plant *poor seed* will make a great hunt for cheap trees, which a wide awake, well posted grower would not plant if paid a bonus for doing so.—*Mich. Fruit Growers' Ass'n.*

A tree's a tree? Yes,—and so is a shoe a shoe, or a colt a colt. You want something good. If you understood trees as well as you do shoes or horses it would be easy to decide—but do you? When buying a thing whose value you don't know, you pick out an old established firm to trade with, and trust their experience and reputation. It is the safe way.

Standard Apples, 30 feet apart each way; Standard Pears and strong-growing Cherries, 20 ft. apart; Duke and Morello Cherries, 18 ft. apart; Standard Plums,

DISTANCES FOR

PLANTING.

Apricots, Peaches, Nectarines, 16 to 18 ft. apart; Dwarf Pears, 10 to 12; Dwarf Apples, 10 to 12 ft. apart; Grapes, rows 10 to 16 ft. apart, 7 to 16 feet in rows; Currant and Gooseberries, 3 to 4 ft. apart; Raspberries and Blackberries, 3 to 4 by 5 to 7 ft. apart; Strawberries, for field culture, 1 to 1½ by 3 to 3½ ft. apart; Strawberries, for garden culture, 1 to 2 ft. apart.

NOTE.—A most excellent way in planting an apple orchard 30 ft. apart, is to plant peaches in between. By the time the apples require the ground the peaches will have passed their prime and can be removed.

NUMBER OF TREES ON AN ACRE.

30 ft. apart each way, 50	25 ft. apart each way, 70	20 ft. apart each way, 110
18 ft. " " " 135	15 ft. " " " 205	12 ft. " " " 300
10 ft. " " " 435	8 ft. " " " 680	6 ft. " " " 1210
5 ft. " " " 1745	4 ft. " " " 2725	3 ft. " " " 4840

RULE.—Multiply the distance in feet between the rows by the distance the plants are apart in the rows, and the product will be the number of square feet for each plant or hill; which divided into the number of feet in an acre (43,560) will give the number of plants or trees to the acre.

APPLES.

The first fruit, both in importance and general culture, is the apple. Its period, unlike that of other fruits, extends nearly or quite through the year. By planting judicious selections of Summer, Autumn and Winter sorts, a constant succession can be easily obtained of this indispensable fruit for family use.

There is no farm crop which, on the average, will produce one-fourth as much income per acre as will a good apple orchard. As it takes from six to eight years for an orchard to come in to bearing, some people hesitate to plant, regarding the time and expense as in a great measure lost. In reply to this we would quote the remarks made by O. C. Chapin, of East Bloomfield, N. Y., to J. J. Thomas. He said he considered the yearly growth of each apple tree planted in his immense orchard of over one hundred and fifty acres, to be worth fully one dollar before they commenced bearing. He has had an experience of nearly half a century, and he says he considers this a low estimate. At fifty trees per acre, this would make a yearly increase of value of fifty dollars per acre, which no doubt is quite within the mark.

As fruit has become cheaper on account of the increased supply, a large and constantly increasing European export has sprung up which affords highly remunerative prices for the best selected specimens of our orchards, while the new process of "Evaporation" of fruit has become a recognized auxiliary to the horticulture of the land. With the immense consumption by this process of evaporation, it may be doubted if apple orcharding will ever in any season be less than highly remunerative. All the surplus of orchards—all "wind falls" and defective specimens—can at once be gathered and sold at a fair price to the evaporating establishments which now exist in almost every town in all fruit-growing sections.

	Each	Dozen	Hundred
2 to 3 years old 6 to 7 ft.....	25c	\$2.50	\$15 00
2 " " " 5 to 6 ft.....	20c	2.00	13.00
2 " " " 4 to 5 ft.....	15c	1 50	10.00

SUMMER VARIETIES.

Astrachan Red. Large, roundish; nearly covered with deep crimson; overspread with a thick bloom; juicy, rich, acid and beautiful; a good bearer. July.

Early Harvest. Rather large; round; yellow; flesh nearly white, tender, juicy, crisp, with a rich, sprightly, sub-acid flavor; tree, a moderate grower and very productive; taking all its qualities into consideration, it has no superior among early apples. June and July.

Yellow Transparent. A new Russian variety, imported from St. Petersburg in 1870, by the Department of Agriculture, Washington, D. C. Size medium; color clear white at first, becoming pale yellow when fully matured; flesh tender, juicy, sprightly, sub-acid; quality good to very good. The earliest variety grown, ripens ten days before Early Harvest. Tree a good grower and early bearer.

AUTUMN VARIETIES.

Autumn Strawberry. Medium; yellow, covered with stripes of red; juicy, sub-acid and excellent; a very strong grower, as well as productive. September and October.

Gravenstein. Large, roundish; striped with red; flesh, tender, juicy, very rich; sub-acid, high flavor; productive, handsome and excellent; fine in all localities. August.

Maiden's Blush. Rather large; oblate, smooth, regular, with a fine, evenly shaded red cheek or blush, on a clear, pale, yellow ground; flesh, white, tender, sprightly, with a pleasant, sub-acid flavor. This variety forms a handsome, rapid growing tree, with a fine spreading head, and bears large crops. August to October.

Duchess of Oldenburg. A Russian variety of medium size; of good shape, and beautifully striped with red; fine quality. Early September.

Smokehouse. Large, yellow, shaded with bright red; flesh, firm, crisp, juicy and fine flavored; unsurpassed for culinary purposes; productive; should have a place in every orchard. September to December.

Summer Rambo. This is an old French apple which was pretty freely distributed many years since, and the old trees of which everywhere proved hardy and profitable for early marketing. Tree vigorous, spreading, open round head. Fruit a little above medium size, flat, generally evenly formed, but occasionally a little irregular; pale greenish yellow, stained and streaked with red on the sunny side. Flesh rather soft, sprightly, sub-acid. Good. Ripens early in September.

Wine Apple. (*English Redstreak*). This is a very handsome and an admirable late Autumn apple, or an early Winter apple; a most abundant bearer, a hardy tree; fruit rather above medium size—in rich soils large, firm, regular, nearly round, a little flattened at the end; flesh, yellowish white, juicy and crisp, with a rather vinous, rich and pleasant flavor, good to very good. October to January.

WINTER VARIETIES.

Albemarle Pippin. Perhaps no apple stands higher in the market than this, or brings as high a price; yet others may be more profitable to the grower. It needs a deep, warm soil to bring it to perfection. Fruit, large, round, lop-sided, ribbed and irregular; surface smooth, yellowish green, sometimes bronzy, becoming yellow when ripe; flesh yellow, firm, brittle, juicy; flavor acid, rich, agreeable; trees slow growers in the nursery. January to April.

Baldwin. Large, roundish, narrowing a little to the eye; skin, yellow in the shade, but nearly covered and striped with crimson, red and orange in the sun; flesh, crisp, juicy and sub-acid; rich; tree a vigorous grower and bears abundantly; succeeds well near the mountains, but drops its fruit in some sections. October to January, later near the mountain.

Bellefleur. (*Yellow Belleflower*) Large, irregularly oblong; rich, yellow color; flesh, tender, juicy, crisp, with a very sprightly flavor; tree, a moderate grower. October to January.

Ben Davis. Originated in Kentucky; tree, remarkably healthy, vigorous and abundant bearer; fruit, large, handsome, striped, flesh, white tender, juicy, sub-acid; a very profitable market variety; should be in every orchard. December to March.

Carthouse or Romanite. Medium size, roundish, oblong; striped and shaded with deep red on greenish yellow ground; flesh, yellow, firm juicy and rich, becoming tender and sprightly in the Spring; valuable for the South; an early and profuse bearer and a good keeper. January to May.

Domnie. Size, medium; greenish yellow in shade, with stripes and splashes of red in the sun; flesh, white, tender, juicy, with a pleasant, sprightly flavor. December to March.

Fallawater. (*Tulpehochin or Pound*) Very large, roundish, yellow, with generally a fine red cheek; juicy, crisp and pleasant; a very popular apple; tree a strong grower and good bearer.

Gano. (*Red Ben Davis*) Fruit and tree closely resembles the well-known Ben Davis, but more highly colored; yellow; nearly covered with dark red; very handsome; large; flesh, pale yellow; mild sub-acid. Season with Ben Davis. A good keeper.

Grimes Golden. Medium to large; rich, golden yellow; flesh, crisp, tender, juicy, with a peculiar aroma; tree a good grower and early bearer; origin, Virginia. January to April.

Ivanhoe. A chance seedling from Albemarle Co., Va. It has proved, after thorough testing of many years, to be a very valuable apple. Tree hardy and productive; bears young, sometimes at two years, in the nursery row; bears every year, and will keep until apples come again, and are plentiful; above medium size; yellow, with slight blush sometimes in the sun; the flavor is excellent, crisp and sprightly; of the Pippin type, resembling the Albemarle. A valuable winter apple.

Jonathan. Medium; red and yellow; tender, juicy, rich and good; rather poor grower. November to January.

King of Tompkins Co. Large; striped red and yellow; flesh, tender and very agreeable; one of the most popular apples; tree a good grower and produces unusually good crops. December to April.

Lankford's Seedling. Large size; red, striped with darker shade; particularly valuable for southern growing. Tree is a splendid bearer, with fruit of excellent keeping qualities. This apple has been kept until May and June with ordinary treatment.

Lawver. Large, roundish, flat; mild, sub-acid, very heavy and hard; a beautiful dark red, the handsomest of all the extra-late keepers; very valuable as a late market sort; tree vigorous, good grower, very hardy and bears well. January to June.

Mammoth Black Twig. The world is but just beginning to find out what a prize it has in this wonderful apple. In 1893, the year of the great apple failure, it bore "perfect fruit in abundance when all others were nearly a failure."

The original tree over 50 years old, is still vigorous and bearing, though broken by storms. Thought to be a cross between Winesap and Red Limber Twig;—combines the good qualities of both. Excels Winesap in nearly every important point: a better and much stronger grower, hardier, and the fruit much larger—often measures 12 inches in circumference; color even a darker red, flesh firmer, flavor milder, but fully equal. Remarkably heavy and a long keeper.

Nero. A very beautiful Winter apple; tree a good grower and profuse bearer; extremely popular in New Jersey, where it is sought after and planted largely; prized for its good size, fine appearance, and remarkable keeping qualities. I should say this apple was a seedling of the Carthouse, retaining all the good qualities of its parent, but much larger in size.

Nickajack. This apple is very widely disseminated in the Southern States, where it is known under about forty different names, which is pretty good evidence that it has proven itself a valuable sort; fruit large roundish, skin striped and splashed with crimson, flesh yellowish, compact, moderately tender and juicy, sub-acid; quality only good. November to March.

Northwestern Greening. A Wisconsin seedling of great value; has stood the most trying tests and found to be equal to Wealthy in point of

hardiness, but superior in fruit and keeping qualities; large. smooth, greenish yellow; flesh fine grained, juicy, firm; good quality; thoroughly tested. January to April.

Northern Spy. Large, roundish; prettily striped with red; with a mild, pleasant flavor; very popular in some sections, especially for its keeping properties; very rapid and erect grower. January to March.

Rambo. Fruit above medium size; skin smooth, streaked with dull yellowish red; flesh greenish white, very tender, with a rich, spicy, sub-acid flavor; very productive. October to January.

Rhode Island Greening. Large; greenish yellow; tender, juicy and rich, with rather an acid flavor; an abundant bearer. November to January.

Rome Beauty. A splendid Apple, thriving well in the southwest. The tree is a moderate grower and late bloomer. Fruit is large and round, somewhat conical; yellow, striped with red; flesh yellowish, tender and juicy. October to December.

Stark. Large; skin greenish yellow, splashed all over with light and dark red; its large size, fine appearance, and fine keeping qualities make it valuable for planting where long keepers are desirable. January to May.

Stayman's Winesap. A favorite cider Apple, and at the same time a valuable variety for dessert or general winter use. It is of medium size and conical form; mostly covered with red on yellow ground, and with fine, crisp flesh, with a rich, high flavor. Keeps till May.

Smith Cider. Medium to large; greenish white, striped with red; tender crisp, with a mild and pleasant flavor; grows slowly in the nursery; bears abundant crops; a very popular apple. December to March.

Winesap. Size medium; rather oblong; dark red; flesh yellow, firm, crisp, and high flavored; they will hang late on the tree; excellent for cider; produces fine crops. December to April.

Winter Sweet Paradise. Medium; green, with a brownish blush; flesh white, fine grained, juicy, sweet and sprightly; good keeper. November to March.

York Imperial. Medium size; truncated, oval, angular; skin greenish yellow, nearly covered with light red; flesh tender, crisp, juicy, aromatic; an enormous bearer, and hangs well on the tree; it is also a good keeper, retaining its flavor to the last. I cannot say too much in favor of this apple; it is undoubtedly one of the best keepers I know.

York Stripe. Fruit large, roundish, slightly conical, slightly angular; skin pale whitish yellow, shaded and rather thinly striped and splashed with red over the whole surface, but quite faintly on the side least exposed to the sun; flesh white, rather coarse, breaking, moderately juicy, mild, sub-acid, good, core small. January to March.

CRAB APPLES.

	Each	Dozen	Hundred
First Class.....	25c	\$2.50	

Hew's Virginia. Small, round; dull red; highly esteemed for cider; tree a good bearer and very hardy.

Hyslop. Fruit large for its class; produces in clusters; dark rich red, covered with a thick blue bloom; good for culinary uses and for cider.

Transcendant. Fruit large for its class; golden yellow, with a beautiful, rich, crimson cheek; when ripe, the red or crimson nearly covers

the fruit; flesh creamy yellow, crisp, sub-acid, pleasant and agreeable, this is truly a beautiful fruit; tree a rapid grower and productive. Sept.

PEARS.

The increasing demand for this fruit, and the great profit arising from its culture, have called forth the energy and exertions of our leading pomologists to originate new varieties, and to bring to notice the most valuable kinds. To what extent they have succeeded we will leave for those to say who have visited some of the grand exhibitions of fruit; yet we say that the majority as yet are wholly ignorant of the rich and delicious qualities of this fruit, but we hope the day is not far distant when every orchardist and every farmer will have his pear orchard, and feel that this fruit is quite as valuable a product as the apple.

In ripening the fruit, it should be understood that summer and fall varieties should be picked from a week to a fortnight before maturity, and winter sorts before frost overtakes them. Most sorts, if allowed to ripen on the tree, are but second rate or of inferior quality, while if picked as above directed and ripened in the house, they are delicious.

Standard Pears, although preferring a strong loam, can be grown in any orchard with the same cultivation as apples, and will bear much more neglect than when worked on the quince stock; nevertheless, the rules that we have given under the heading of "After Management," must be attended to, to secure strong, healthy trees.

Dwarf Pears are intended to be grown with strict attention and high cultivation, if perfection be aimed at; and where these are attended to, no fears need be entertained as to the result. To grow them in the highest perfection select rather a heavy soil, and trench it two or three spades deep, at the same time enriching it well with rotten manure, bone dust, ashes, etc., and endeavor to have the heaviest portion of the tree close to the ground; this can be accomplished by proper pruning.

Those marked "Q" succeed well on the quince stock.

	Each	Dozen	Hundred
Standard 2 and 3 yrs old 5½ to 7 ft.	35c	\$4.00	\$25.00
" " " " 5 to 6 ft.	25c	3.00	20.00

SUMMER VARIETIES.

Beurre Giffard. A new pear; rather above medium size; flesh white melting, juicy, with an excellent vinous flavor; delightfully perfumed; a valuable early pear; productive. Ripens in July.

Bartlett. Large; yellow, with a soft blush on the sunny side; flesh white, exceedingly fine grained and buttery, sweet, very juicy, with a highly perfumed, vinous flavor. This is justly esteemed one of the very best pears in cultivation, and deserves a place in every collection; bears early and well. July and August. Q.

Clapp's Favorite. A first-rate early variety which is rapidly growing into favor; resembles the Bartlett in appearance, but ripens a week or ten days earlier; one of the best native sorts, fruit large, skin smooth, yellowish green, becoming yellow, dotted and shaded with red next to the sun; flesh yellowish white, juicy and melting; of very good quality. Last of July. Q.

Koonce. Medium to large, exceedingly handsome, golden yellow with a fine red cheek; as large and beautiful as Jefferson, Early Harvest or Lawson, and not only much earlier, but of good quality.

Lawson. This handsome variety is the largest of our early pears; bright yellow, with rich crimson cheek; flesh crisp, juicy and pleasant, but not rich. Middle of July to middle of August.

Manning's Elizabeth. Small, yellow, with a bright red cheek; very sweet and sprightly, with a peculiar flavor, one of the best early pears for the amateur or for market; tree a moderate grower and good bearer. August.

Wilder. A beautiful early pear, bell shaped, yellow with slight blush; flesh yellow, fine grained, sub-acid; does not rot at the core. Tree vigorous and bears young. July.

AUTUMN VARIETIES.

Angouleme. (*Duchesse d' Angouleme*). Very large, dull greenish yellow, streaked and spotted with russet; flesh white, buttery and very juicy, with a rich and very excellent flavor; on young standard trees the fruit is variable, but on the quince, to which stock this variety seems well adapted, it is always fine. The large size and fine appearance of this fruit make it a general favorite. September to November. Q.

Anjou. (*Beurre d' Anjou*.) Large, greenish, sprinkled with russet sometimes shaded with dull crimson; flesh whitish, buttery, melting, with a high, rich, vinous, excellent flavor; very productive; succeeds well on the quince; should be in every orchard. October and November. Q.

Belle Lucrative. Above medium size; yellowish green; melting and fine; a good grower and bearer; does well on the quince; one of the very best pears and should be in every collection. August and September.

Brandywine. Rather above medium size; dull, yellowish green, dotted and sprinkled with russet, and a slight red cheek on the exposed side; flesh white, melting, juicy sugary and vinous, somewhat aromatic; uniformly productive. August. Q.

Kieffer. A variety originated near Philadelphia, and supposed to be a cross between the Chinese Sand Pear and the Bartlett: tree a vigorous grower; an early and abundant bearer, fruit medium to large; skin yellowish, with a bright vermilion cheek; flesh brittle, very juicy, of good quality; valuable for market or family use; succeeds best as a standard. September.

Le Conte. Tree very vigorous and productive, partaking of the nature of the Chinese Sand Pear, of which it is a seedling; fruit large; skin smooth, pale yellow; quality fair. Ripens about with the Bartlett.

Lincoln Coreless. Peculiar in the fact that the fruit has neither seed nor core, very large, high colored and handsome; flesh of a rich, yellow tint, mellow and aromatic. In season it is late, and the pears are picked when hard and green, and laid away to ripen. It has kept in an ordinary cellar until March—longer than any other pear has been known to keep. Being also a good shipper, it is valuable for market. The fruit being all solid, rich meat of such good flavor and large size—sometimes weighing from a pound to a pound and a half—it is especially desirable for family use, in fact no home collection is complete without it; and when sent to market it sells quickly at sight. This very unique pear originated in Tennessee where the original tree yet stands, over sixty years old, and continues to bear with unfailing regularity. Its remarkable fruit has occasioned considerable comment and awakened much curiosity but it has proved itself to be a valuable pear in all points, and especially for its good quality, vigor and productiveness.

Sheldon. Medium size ; yellow, or greenish russet, with a richly shaded cheek ; flesh a little coarse, melting, juicy, with a brisk, vinous, highly perfumed flavor ; productive. October.

Seckel. Small ; skin brownish green at first, becoming dull yellowish brown, with a lively russet red cheek ; flesh whitish, buttery, very juicy and melting, with a peculiar rich, spicy flavor and aroma. This variety is pronounced by good judges, the richest and most exquisitely flavored variety known ; and we may add to this that the tree is the healthiest and hardiest of all pear trees, forming a compact and symmetrical head, and bearing regular and abundant crops at the ends of the branches. Ripens August to middle of September. Q.

WINTER VARIETIES.

Easter Bueree. Large size ; yellowish green, sprinkled with russet dots, and sometimes considerably russeted ; flesh white, fine grained, very best Winter pears. December to March.

Lawrence. Medium ; light yellow, mostly sprinkled with dots ; buttery, rich and aromatic. This variety has proven to be one of the most reliable and best of its season. November and December. Q.

PEACHES.

The Peach succeeds best on a light warm loam, with a dry subsoil. Elevations protected by a belt of timber, are often selected as sites for the peach orchard, and generally with good results.

The young orchard should be thoroughly cultivated and kept clear of weeds. Hoed crops may be grown for three or four years, after which the ground should be annually plowed, being careful to avoid injury to the roots by not allowing the plow to run too deep when passing near the trees. After the orchard begins bearing it should not be summer cropped ; we could especially advise against seeding to any kind of small grain.

We have found less trouble with the borer where clean culture is practiced, though gummy trees should be examined Spring and Fall, and the grubs removed by the use of a pointed knife.

	Each.	Dozen.	Hundred.	Thousand.
1 year old 5 to 6 ft	15c	\$1.50	\$8.00	\$60.00
1 " " 4 to 5 ft.	15c	1 25	6.00	50.00
3 to 4 ft.		1.00	5.00	45.00

Alexander. Medium to large ; skin greenish white, nearly covered with deep, rich red ; flesh melting, juicy, sweet, white at the stone, to which it adheres slightly, and which is small ; rots.

Beers' Smock. A seedling of, and superceding the old Smock ; free-stone, fruit medium to large ; skin light orange yellow, mottled red. No orchard is complete without it.

Bilyeu's Late October. Large ; white flesh, and on sandy soil resembles Mountain Rose very much. Good for canning and preserving, and a splendid drying peach.

Chairs' Choice. Originated in Anne Arundel Co., Md. Fruit of very large size, yellow, with a red cheek ; flesh yellow, firm and of good quality ; tree a strong grower and a good bearer. Ripens just before Smock.

Champion. This new peach comes from Illinois, recommended as an ironclad against frost, as in 1890, when there was a total failure of the peach crop, it bore heavily. It has stood a temperature of 18° below

zero, and bore well the following season. Fruit is of a large size ; skin creamy white with red cheek ; the flesh is white, rich and juicy ; a perfect freestone and good shipper. July.

Christianna. A beautiful and most delicious peach ; yellow, with fine blush ; freestone ; very large ; about the size and shape of Reeve's Favorite ; it ripens between Crawford's Late and Smock, where there are some ten days during which the orchardists have no peaches to pick, this alone, saying nothing of its superior size and quality, must make this a very desirable peach.

Connet's Southern Early. A seedling of the old Chinese Cling, which originated in Guilford county, N. C. It has extra large fruit of a cream white shade, having a beautiful blush next to the sun. It is one of the most delicately colored Peaches grown, and a clear freestone with a small seed. Of fine quality.

Crawford's Early. Large ; yellow, and of fine quality. Its size and beauty make it one of the most popular orchard fruits, and it is most valuable as a market variety. This has been underestimated on account of inferior species of the same being placed on the market.

Crawford's Late. A superb yellow peach ; very large, productive and good ; reliable and popular everywhere.

Early Rivers. Medium to large ; creamy white, shaded with light red next to the sun ; flesh white, juicy, melting, sweet and rich. A good bearer, and the earliest variety of value to plant ; it has cleared under favorable circumstances over \$400 per acre

Elberta. An exceedingly large, high-colored yellow peach—a cross between Crawford's and Chinese Cling ; juicy, well-flavored ; said to be probably the finest yellow freestone in existence. Ripens early in August.

Fox's Seedling. Large ; skin white, with a red cheek ; flesh melting, sweet and good ; a desirable sort for canning or marketing. First of Sept.

Ford's Late White. It is the latest white freestone peach ; its season of ripening makes it specially valuable as a market variety. No fruit grower can afford to be without a peach like Ford's Late, which ripens in September after the season of Smock, Late Heath and Salway, and at a time when the market is almost destitute of choice fruit, and must necessarily command a high price.

Fitzgerald. The best posted growers in Michigan say it is as large or larger than Crawford Early, with the smallest pit I ever saw and the most brilliant color, grows similar to Crawford and ripens between Early and Late Crawford ; flesh rich, deep golden yellow, with high character ; certainly a very fine peach ; stands the winter better than any yet offered.

Geary's Hold-On. Large, yellow peach, seedling of the Smock ; fruit large ; pale lemon yellow ; ripens a little later than Smock.

Greensboro. Originated in Greensboro. N. C., ripening earlier than Alexander, and nearly double its size ; yellowish white, beautifully colored with crimson cheek ; flesh white, very juicy and of fine quality ; skin thin and rubs off easily.

Heath Cling. Very large ; creamy white, with small red blush ; sweet and luscious ; a valuable variety.

Large Early York. Is rather large and a beautiful peach, well worthy a place in every good collection. The tree is vigorous and productive ; fruit dotted with red in the shade, deep red cheek to the sun ; flesh nearly white, fine grained, very juicy, with a mild, rich, excellent flavor ; a very valuable sort. Twenty-fifth of July.

Late Golden Drop. Medium to large ; golden yellow, a good bearer and hardy freestone ; runs into Smock in ripening, and is one of the most

profitable of peaches, having always brought a higher price than any in competition with it.

Levy's Late. (*Henrietta*.) A new late clingstone, which originated in the garden of W. W. Levy, Washington, D. C. Fruit large, roundish; skin deep yellow, a shade of brownish red in the sun; flesh deep yellow, rather firm, juicy, half-melting, sweet; very good and a valuable variety. First to last of October.

Lorentz. A seedling discovered in Marshall County, W. Va., and has never been known to fail a crop, even in most unfavorable seasons. It bears crops when others fail entirely. It is unusually large, of superior flavor, freestone, yellow flesh and handsome appearance. Has been a surprise to all who has seen it. Season of ripening after Smock.

McColister's Mammoth. Large, pale yellow; ripens just ahead of, and runs into Smock; of rich flavor, and valuable.

Mountain Rose. Large; white, but nearly covered with beautiful carmine; hangs to the tree firmly until well colored and ripened; flesh white, tender, juicy, excellent.

Globe. Its size, beauty and flavor have commended it so highly that it has brought for the past twelve years from 50 to 100 per cent. more than the best of other varieties. It is a freestone, golden yellow, with a red blush covering half the surface of the peach; globular in form, flesh yellow, flavor luscious and in quality best. It has produced specimens nearly fifteen inches in circumference. A very shy bearer.

Old Mixon Free. Large; with a red cheek, rich and very fine; good bearer, and valuable as a canning and shipping variety.

Red Cheek Molocton. A famous, old, well-known and popular variety, extensively cultivated as a market fruit, large; skin yellow, with a deep red cheek; flesh, red at the stone, juicy, with a good, rich, vinous flavor; productive. Freestone. Middle of August.

Reeves' Favorite. Fruit very large and roundish; skin yellow, with a fine red cheek; flesh, deep yellow, juicy, melting with a good vinous flavor. This is a very valuable variety; it is a little shy as a bearer, but the size of the fruit and the price obtained make it one of the most profitable varieties for market use.

Salway. Resembles Beers' Smock, but is finer in appearance and ten days later; valuable.

Slump of the World. Very large, creamy white, with a bright red cheek; flesh, white, juicy, and high flavored. Beginning of September.

Susquehanna. A handsome and valuable peach, originated on the banks of the Susquehanna river, in Pennsylvania; a great favorite wherever known; fruit of the largest size—sometimes measuring 12 inches in circumference; skin rich yellow, with a beautiful red cheek, flesh, yellow; juicy, sweet, with a rich, vinous flavor; the best of all the yellow fleshed peaches; freestone, a moderate bearer. Twenty-fifth of August.

Stevens' Late Rareripe. A very popular New York peach, which grows to immense size when thinned; very hardy. Freestone, Late.

Triumph. Earliest yellow peach in the world. Fruit growers have, for many years, been looking for a good freestone market peach to take the place of the Alexander. The Triumph, originated by J. D. Husted, of Georgia, fully supplies their wants. It ripens with Alexander; blooms late; has large flowers; a sure and abundant bearer; and the tree makes a very strong growth. Several trees (two-year old buds) produced this season over half a bushel of fruit each. The fruit is of large size, with a very small pit, and is indeed beautiful. Surface is yellow, nearly covered

with red, and dark crimson in the sun. Flesh bright yellow, free when fully ripe, and of excellent flavor.—Originator.

Troth's Early Red. A very excellent and profitable variety. Fruit, medium, roundish; skin whitish, with red cheek; flesh, white, red at stone, juicy and sweet. Was once discarded, but is now one of the best paying varieties on account of its shipping qualities.

Wonderful. Is a very large, late, handsome, yellow with red cheek; flesh yellow, quality excellent, and will keep a long time in good condition; a good shipper; freestone; pit small; valuable for canning or preserving; tree a strong healthy grower and very productive.

CHERRIES.

The Cherry tree universally requires a dry soil, and is naturally a hardy tree, succeeding in the lightest soil or dryest situations. Many varieties of rapid growth with large, glossy leaves, forming fine, pyramid, shaped heads, and producing large crops of luscious fruit, are well adapted for planting along the streets or in the yards, as shade trees.

By a proper selection of varieties, they may be profitably grown for market. Many trees produce from five to six bushels per tree. The fruit brings in market, one year with another, \$2 to \$3 per bushel.

	Each	Dozen	Hundred
2 and 3 year old 5 to 6 ft.....	50c	\$5.00	\$35.00

Black Tartarian. Fruit of largest size, frequently measuring an inch in diameter; flesh dark, half tender, with a peculiar liver like consistency, rich, nearly destitute of acid, of very fine flavor; the vigorous growth and great productiveness of the tree, and the large size and mild sweet flavor of the fruit, render this variety a general favorite. June.

Governor Wood. One of the best of Dr. Kirtland's seedlings and deserves a place in every good collection; fruit large; skin light yellow, shaded with bright red; flesh nearly tender, juicy, sweet, rich and delicious; tree vigorous and productive.

Ida. A new and promising variety, raised by E. H. Cocklin, of Shepherdstown, Pa., who says that it is a seedling of Conklin's Favorite, and has born good crops for fifteen years. It is considered worthy of general cultivation. It is named after his daughter Ida. Tree vigorous, upright and abundant bearer; fruit medium, or rather large, obtuse, conical, slightly compressed; suture slight; skin pale whitish yellow, nearly covered with bright red, more or less mottled; stalk of medium length, slender, inserted in a rather large, deep cavity; flesh very tender, juicy, rich; very good, of best quality; pit very small. Season about the time of May Duke. One of the most profitable cherries I know either for market or shipping.

Napoleon Bigarreau. Is one of the best firm-fleshed cherries; it is of the largest size, measuring over an inch in diameter; well flavored, handsome and productive; skin pale yellow, becoming amber in the shade, richly dotted with deep red, and with a fine, marbled, dark crimson cheek. flesh very firm, juicy, with a very good flavor; profitable for marketing; June.

Ohio Beauty. Large; red; flesh tender, brisk, juicy; productive. Middle of June.

Rockport Bigarreau. Large; deep, brilliant red; flesh rather firm, juicy, sweet, rich, with an excellent flavor; a very desirable and profitable cherry. Beginning of June.

Schmidt's Bigarreau. Remarkably vigorous, hardy and productive. Fruit grows in clusters, and is of the largest size; skin deep black; flesh dark, tender, juicy, with a fine rich flavor; stone small. July.

Yellow Spanish. Large pale yellow, with red cheek; firm, juicy and excellent; one of the best light colored cherries; productive. Early in July.

DUKE AND MORELLO CHERRIES.

The Dukes and Morellos are not so vigorous and upright in their growth as the Hearts and Bigarreus, forming low, spreading heads, with acid or sub-acid fruit.

Dyehouse. In hardiness and general appearance it resembles Early Richmond, but is of finer quality and several days earlier; fruit medium; skin bright red, darkened in the sun; flesh soft, juicy, tender, sprightly, sub-acid, rather rich in flavor.

English Morello. About medium size; skin dark red, becoming nearly black; flesh juicy, sub-acid, rich. July.

Kentish, or Early Richmond. Medium size; red; flesh melting, juicy, and at maturity, of a rich, acid flavor; very productive; fine for cooking; commences ripening last of May, and hangs long on the tree.

May Duke. Medium size; dark red; melting, rich and juicy; an old and popular sort; ripening early in June.

Montmorency, Large-Fruited. Fruit large, and the finest flavored of any in this class; tree a free grower, hardy and prolific.

Reine Hortense. Fruit very large; bright red; flesh tender, juicy nearly sweet, delicious; a vigorous grower, a very productive and desirable sort. Middle of July.

PLUMS.

The plum will grow vigorously in almost every part of this country, but it only bears its finest and most abundant crops in heavy loams, or where there is considerable clay. It will bloom and set a fine crop in a sandy soil, but in such soil it generally falls a prey to the curculio, and drops prematurely. There are, however, some varieties that succeed very well in such situations.

The curculio, a small, brown insect, commences its depredations on the fruit as soon as it has attained the size of a pea, and continues its course of destruction until the crop is matured. It makes a small, crescent-shaped incision in the fruit, and lays its eggs in the opening; the egg hatches into a worm, which feeds upon the fruit, causing it to fall prematurely. The only preventative that is known to succeed with any degree of certainty, is to place a white sheet under the tree early in the morning, when cool, and by jarring the tree suddenly, the insects fall upon the cloth, and being stiff, can easily be caught. By repeating this a few mornings in succession, at different times, you may be able to save a good crop of fruit.

	Each	Dozen	Hundred
2 year old 5 to 6 feet (On Plum Stock)	35c	\$4.00	\$20 00
" " " 4 to 5 feet..... "	25c	3.00	18.00

Abundance. Lemon-yellow ground, nearly overspread with cherry, with heavy bloom; flesh yellow, very juicy; sub-acid, with apricot flavor; highly perfumed; stone small; the tree is exceedingly hardy and bears regularly; nearly curculio proof; early and heavy bearer; the best of its class. First of August.

Burbank. Resembles the Abundance in many ways; globular, large, cherry red, with slight lilac bloom; flesh deep yellow, very sweet, with pleasant and agreeable flavor; strong grower; bears early, often at second year. September 1st.

Bradshaw. Fruit very large, dark violet red; flesh yellowish green; juicy and pleasant; very productive.

Coe's Golden Drop. Large and handsome; light yellow; firm, rich, sweet; one of the best late plums.

Fellenberg. (*Italian Prune.*) A fine late plum; oval, purple; flesh juicy and delicious; parts from the stone; fine for drying. Tree very productive.

Hale. One of the most satisfactory Plums under cultivation, and rapidly growing in popular favor, Large in size and round; of beautiful golden orange, thinly overlaid with mottled red, giving it a yellowish red appearance; flesh yellow, soft and juicy; flavor delicious; a splendid keeper and shipper; cling-stone. Ripens very late.

Lombard. Medium size; skin delicate violet, dotted with red; flesh deep yellow, juicy and pleasant, but not rich; adheres to the stone; productive. August.

Prince's Imperial Gage. Rather large; greenish yellow; flesh greenish, juicy, rich and delicious; sometimes adhering to the stone; tree vigorous and very productive; a single tree near Boston yielding fifty dollars worth of fruit in one year; this variety is particularly adapted to dry, light soils; valuable. August.

Prince's Yellow Gage. Above medium size; skin yellow; flesh deep yellow, rich, sugary and melting; parts freely from the stone; the great hardiness and productiveness, joined to its rich, sugary flavor, make this a favorite sort. First of July.

Red June, The Coming Japan Plum. After fruiting it five seasons, Red June proves to be worth more than all the other 20-odd Japs we have fruited put together.

Satsuma, or Blood Plum. Large, round; skin and flesh dark purplish red, with blue bloom; seed exceedingly small; flesh firm, of good quality; fine flavored; very hardy and strong grower, adapted mainly to the Southern states, does well in the North. August.

Saratoga. It is an exceedingly promising plum and likely to prove a profitable market variety. The tree is of vigorous growth and very prolific, coming into bearing early, and seldom fails to mature a good crop. The fruit is of large size, of a bright reddish purplish color, covered with abundant bloom, roundish in form and of excellent quality. The firmness of its flesh and its good keeping properties render it valuable for shipping.

Smith's Orleans. Large; reddish purple, becoming very dark; flesh deep yellow, slightly firm, juicy, rich, nearly first-rate; adheres to the stone; this is one of the most vigorous of all plum trees; very productive August.

Spaulding. The Spaulding is a curculio-proof plum, and its curculio enduring proclivity is not its only merit. Unlike most other so-called curculio-proof plums of which we have any knowledge, it does not belong to the Chickasaw or American species, but has descended from the same species as Green Gage, Coe's Golden Drop, Lombard, etc. It is not exempt from the attacks of the "Little-Turk," any more than other varieties of the European Plum, but for some reasons the wound is soon outgrown, the plums develop fair and perfect and no harm is done. The

tree is a remarkable grower, with leathery, large, rich dark foliage. It ripens middle of August. The fruit is large, yellowish green with marblings of a deeper green and a delicate white bloom; flesh pale yellow, exceedingly firm, of sugary sweetness, though sprightly and of great richness, parting readily from the small stone.

Shipper's Pride. Seedling from north-western New York, where it has proved very hardy and reliable. Large, dark purple, flesh firm and of excellent quality. First of September.

Shropshire Damson. From Shropshire, England; double the size of the common damson and of better quality, being the largest size of its class; dark purple; highly esteemed for preserving; tree vigorous and enormously productive. September.

Washington. Very large; skin yellowish green, often with a pale red blush; flesh yellowish, firm, very sweet and luscious; separating freely from the stone. There is, perhaps, not another plum that stands so high in general estimation in this country as the Washington; its great size, its beauty, and the vigor and hardness of the tree, are qualities which claim for it a place in every good collection. August.

Wild Goose. Medium size; oblong; bright vermillion red; juicy, sweet and of good quality; cling, productive, and nearly proof against the curculio. July.

Wickson. Remarkably handsome, very large, and of a deep maroon-red; one of the hardest; flesh amber-colored, firm, meaty, and clinging to the pit, which is small. One of the most desirable Plums, either for home use or market.

Yellow Egg. (*White Magnum Bonum.*) A very popular fruit on account of its very large size and splendid appearance; its slight acidity renders it valuable for making sweetmeats; skin yellowish, covered with a white bloom, flesh yellow, adhering closely to the stone, rather acid until it becomes very ripe. Last of July.

APRICOTS.

This beautiful and excellent fruit needs only to be known to be appreciated. It ripens a month or more before the best peaches, and partakes largely of their luscious flavor. The tree is even more hardy than the peach, requires about the same treatment. To make the crop more certain, plant on the north or west side of a wall, fence, or building.

	Each.	Dozen.	Hundred.
1 year old 4 to 5 feet.....	25c	\$3.00	

Breda. Small, round; dull orange in the sun; flesh orange colored, juicy, rich, vinous and sprightly flavored; parts from the stone; tree very hardy and productive. July.

Harris. Origin, New York. A new kind of great promise; very hardy; blooms late; a sure bearer; elegant golden yellow color.

Moorpark. One of the largest and finest apricots; yellow, with a red cheek, flesh rather firm, orange, parting from the stone, sweet, juicy and rich, with a luscious flavor.

Peach. Very large; yellowish orange, and mottled with brown to the sun; flesh rich yellow, juicy, with a rich, high flavor; this is justly esteemed one of the very best apricots; productive. First of July.

QUINCES.

The Quince is attracting a great deal of attention as a market fruit. Scarcely any fruit will pay better in the orchard. The tree is hardy and compact in growth, requires but little space, productive, gives regular crops, and comes regularly into bearing. The fruit is much sought after for canning and for winter use ; when put up in the proportion of about one quart of quinces to four of other fruit, it imparts to them a most delicious flavor. It flourishes in any good garden soil, which should be kept mellow and well enriched. Prune off all the dead and surplus branches, and thin out the fruit if bearing too freely.

3 to 4 feet.	Each 35c	Dozen \$4.00	Hundred \$20.00
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Apple or Orange. Large roundish, with a short neck ; color light yellow ; tree very productive ; this is the most popular variety in the country ; a great bearer. Ripens in October.

Bouogest. A new golden prolific variety, of the best quality, ripening shortly after Orange and keeping until midwinter. Tree a remarkably strong grower, surpassing all others ; yielding immense crops ; fruiting at 3 and 4 years in nursery rows ; leaves large, thick and glossy ; fruit of largest size, round ; rich golden color ; smooth ; very tender when cooked ; has been kept until February in good condition.

Meech's Prolific. A new variety, recently introduced by Rev. W. W. Meech, of Vineland, New Jersey. Fruit of large size ; eighty quinces of the largest size made a bushel ; very handsome and attractive, of delightful fragrance and delicious flavor ; cooks as tender as a peach. Remarkable for early bearing and great productiveness ; five year old trees have yielded over half a bushel of fruit.

Champion. Tree extremely hardy, of stout, rugged, upright growth, ascending in a single stem, with smooth bark. A profuse and regular bearer, and its early bearing is remarkable, commencing to produce fruit at three and four years old. Fruit large, obvate pyriform in shape, and of a lively yellow color, rendering it very showy and handsome. Flesh tender and free from the hard lumps so common in other quinces. In fine flavor, it is fully equal to the well-known Orange variety. Ripens about two weeks later than the Orange, and will keep until Christmas.

NUT-BEARING TREES.

All over the country there is a rapid growing interest in nut culture. The demand for nuts is great ; the markets are poorly supplied, and the prices too high. Palatable and wholesome as they are, they should become a common article of food here, as in Europe.

Numerous experiments show plainly that nut culture of nearly every kind can be carried on in the United States with entire success ; in fact statistics plainly prove that a well cared for nut orchard is a "gold mine," indeed. We have accounts of single trees paying from \$25 to \$50, and many cases are noted where an acre clears from \$150 to \$600 annually.

A large portion of the nuts on our markets are imported. We are sure, that with proper care and culture, we can raise enough to have plenty at home and export largely at paying prices. Most kinds of nuts are planted 30 feet apart, like apple trees, and require about the same general culture.

CHESTNUTS.

Japan Mammoth. This valuable new nut is attracting widespread attention. It claims superiority over all others because it is larger, sweeter,

better ; bears young and abundantly ; like all valuable fruits now-a-days, it is necessary to graft to secure and maintain the most reliable kinds ; the tree is dwarf in habit, hardy and ornamental. 75c each.

Spanish or Marron. (*Castanea Vesca.*) Originally introduced from Asia Minor into Europe ; a vigorous grower, and forms a handsome head for lawn planting ; a valuable species, both for ornament and fruit ; the fruit is much larger than the American variety ; very sweet and excellent when boiled or roasted. Bears early. 75c each.

American. (*Castanea Americana.*) The well known native variety ; a stately tree, with broader leaves than the European, and producing smaller nuts but a large quantity of them ; both useful and ornamental ; the timber is very useful for many purposes. 75c each.

Paragon. The Paragon will stand as much cold as the apple tree, and ripens about ten days earlier than the native Chestnut, frost not being required to open the burrs. Forty selected nuts fill a quart measure, and they sell at six to eight dollars a bushel. In point of quality it is equal to the wild nut. This variety bears a full crop every year. What other does that ? Trees of this variety are now flourishing around Rochester, N. Y., Northern Michigan, and Ontario, Canada. 75c each.

WALNUTS.

English. (*Maderia or Persian.*) A fine, lofty-growing tree, with a fine, spreading head and bearing crops of large and excellent nuts ; the fruit in a green state is highly esteemed for pickling, and the great quantity of the ripe nuts annually imported and sold here attest to its value ; the tree is peculiarly well adapted to the climate of the South, and deserves extensive cultivation. 75c each.

American Black. This is the common native variety. The nuts are excellent and always desirable ; besides, the wood is very valuable for many uses. 75c each.

SHELLBARK.

A species of the hickory. The nut is small, rather flat, with thick shell ; it is very rich, sweet and delicious ; very desirable. 75c each.

PECAN.

The common wild native variety found in the South, produced from the seed ; bears regular crops of medium size ; very salable nuts and good ; the tree is rapid growing and handsome.

Paper-Shell Pecan. This is, indeed, the most valuable nut yet introduced ; large, often $1\frac{1}{2}$ inches in length ; thin shell ; the kernel is very large, rich, sweet and delicious ; enormous profits have been received from the culture of this nut ; many thousand trees are being planted, and soon the nut industry, especially of the South, will be very large ; hardy in the Middle States. 75c each.

FILBERTS OR HAZEL NUTS.

We have the best English varieties ; the nut is medium size, oblong, very sweet ; the tree is of bushy habit, growing from 6 to 8 feet high ; very hardy ; early and abundant bearer ; very satisfactory. 75c each.

BUTTERNUTS.

A handsome, rapid-growing, luxuriant, tropical looking tree ; very ornamental and productive, the nuts are something like black walnuts, but longer and flat ; the kernel is much sweeter, richer and more delicate ; fine flavor. 75c each.

GRAPES.

The vine comes quickly into bearing, yielding fruit usually the second year after planting; and requires but little space, when properly trained is an ornament to the yard, garden or vineyard.

It is stated by some of the eminent physiologists, that among all the fruits conducive to regularity, health and vigor in the human system, the Grape ranks number one. We hope soon to see the day when every family shall have an abundance of this wholesome fruit for at least six months in the year.

The soil for the Grape should be dry; when not naturally so, should be thoroughly drained; it should be deeply worked and well manured, always bearing in mind that it is an essential point to secure a warm, sunny exposure. The best grape vine trellis is probably the wire trellis. This is constructed by planting posts as far apart as you choose to have the length of your trellis, stretch the wires, four in number, about 18 inches apart, letting them pass through stakes at proper distances from each other to support the wire. As the wires are contracted by the cold, and are likely to break or sway the posts from their places, they should be loosed as cold weather approaches.

When, however, it is not convenient to make a wire or other trellis, very good results are had with the old vineyard system of training to stakes. The vines are planted in a place exposed to the sun and protected from the cold winds, if convenient, and are trained to an upright stake. This method is as plain as the cultivation of Indian corn. To secure the best results, annual and careful pruning is essential. The following is regarded as the best method: Commence with a good strong vine, such as I furnish, permitting it to grow the first season without pruning. In November or December following, cut back the growth, allowing but three or four buds to remain. The following Spring, allow but two of the strongest buds to throw out shoots. These in the Fall, will be from seven to ten feet long, and should be cut back within four or five feet of the root. The next Spring the vine should be fastened to the lower part of the trellis. When growth commences, pinch the buds so that the shoots will be from ten to twelve inches apart. As they grow, train them perpendicularly, to the second, third and fourth bars of the trellis. No fruit should be allowed to set above the second bar of the trellis.

During the season when the shoots have reached the upper part of the trellis, they may be pinched to prevent further growth. After the fruit is gathered and the vine has shed its foliage, the cane should be cut back to two buds. The following Spring allow but one to throw out a shoot, and treat as in the previous year. This system of pruning should be followed each year. After the vine has undergone the Fall pruning it may be laid upon the ground and covered with boughs, to protect it through the Winter. Grape vines should be top-dressed in the Spring.

General List of Grapes Except Where Noted:

	Each	Dozen	Hundred
2 year old.....	15c	\$1.50	\$10.00

CLASS 1. BLACK GRAPES.

Campbell's Early. A seedling of Moore's Early, crossed with pollen of a choice seedling that resulted from a cross of Muscat Hamburg on Belvidere. It is regarded by Mr. Campbell as the finest grape in all re-

spects that he has produced in forty years of experimenting. Cluster large, shouldered, moderately compact, stem large, long, strong; berry large; nearly round, slightly elongated; black, with profuse, light blue bloom; skin thin, with slight pulpiness; flesh translucent, very tender and juicy; flavor sweet, rich, aromatic; aroma delicate not foxy; quality best, for both market and dessert. Season early. 50c each, \$5.00 per dozen.

Clinton. Bunches small and very compact; berries small; sprightly; when thoroughly ripe is a good table grape and keeps well; valuable for wine. A free rapid grower and profuse bearer; ripens earlier than the Isabella. Deserves to be more extensively grown by the amateur for the table on account of its valuable keeping qualities.

Concord. A large, handsome grape, ripening a week or two earlier than the Isabella; very hardy, productive and reliable; succeeds well over a great extent of country, and is one of the most popular market grapes.

Eaton. Described as "Bunch very large, compact." Berries very large, round, black, covered with a thick purple bloom. In general appearance of the bunch and berry it strongly resembles Moore's Early. Skin thick; very juicy, with some pulp. A very showy grape. 25c each, \$3.00 per dozen.

Merrimack. (*Rogers' No. 19.*) Bunch medium to large, berry large, sweet and rich; vigorous and productive; one of the earliest of the Rogers' varieties.

Moore's Early. Bunch medium, berry large, round, black, with a heavy blue bloom; flesh pulpy and of medium quality; vine hardy and moderately prolific, ripens with the Hartford. Its large size and earliness render it desirable for an early crop. 25c each, \$2.50 per dozen.

Wilder. (*Rogers' No. 1.*) Bunch very large, compact, shouldered; berry large, round, black; flesh tender, slight pulp at center, juicy, sweet. Ripens about with the Concord. Vine vigorous, hardy, and a good bearer. Regarded as one of the best black varieties, and on account of its size and beauty is very valuable for market.

Worden. Said to be a seedling of the Concord. Bunch large, compact, handsome; berries large—larger than those of the Concord—and it ripens a few days earlier and is superior to it in flavor. Destined to become very popular for the vineyard and garden.

CLASS 2. RED AND REDDISH PURPLE GRAPES.

Agawam. (*Rogers' No. 15.*) One of the best of the red varieties, bunch variable in size; sometimes large and handsome; flesh tender and juicy. Vine a good grower and bearer.

Brighton. Resembles Catawba in color, size and form of bunch and berry. Flesh rich, sweet, and of the best quality, equal if not superior to the Delaware; ripens early, with the Delaware, Eumelan and Hartford. Vine productive and vigorous, but in some localities is subject to mildew.

Catawba. Bunches large and loose; berries large of coppery red color, becoming purplish when well ripened; vinous, rich; requires the most favored soils and situations, good culture and warm seasons to mature perfectly in Western New York.

Delaware. This fruit has fully maintained its reputation as one of the finest of our native grapes. The vine is comparatively slender, but grows freely, and is perfectly hardy in this climate; ripens early. Bunch small and compact; berries small, light red, with a violet bloom, beauti-

ful; sweet, sugary and vinous, with a musky aroma. It justly claims a place in every garden.

Lindley. (Rogers' No. 9.) Bunch medium, somewhat loose; berry medium to large, round; color a rich shade of red; rendering it a very handsome and attractive grape; flesh tender, sweet, with a rich aromatic flavor; ripens soon after the Delaware; vine vigorous and productive. It sometimes fails to set a full crop. We regard it as one of the best red grapes in our collection.

Mussasott. (Rogers' No. 3.) Bunch medium, rather loose as the fruit does not always set well; berry medium, brownish red; flesh tender and sweet; very good; one of the best flavored of the Rogers'. Early as Hartford. A desirable garden variety.

Mills. This variety was raised by Mr. William H. Miller, of Hamilton, Ont., by crossing Muscat Hamburg and Creveling. Bunch very large, compact, shouldered, some clusters weighing over fourteen ounces. Berry large, round, jet black, covered with a thick bloom; flesh firm, meaty, juicy, breaking, with a rich, sprightly flavor. Skin thick; berries adhere firmly to the peduncle. Vine vigorous and productive; foliage large and healthy. Ripens about with the Concord or a little later, and is a long keeper. 25c each, \$2.50 per dozen.

Salem. Rogers' No. 53. Bunch large, compact; berry large, round coppery red; flesh tender, juicy; slight pulp; in quality one of the best. Ripens with Concord. Vine healthy, vigorous and productive. One of the most popular of the Rogers'.

Vergennes. Originated in Vermont. Bunch of medium size, somewhat loose, not uniform; berry large, round; skin thick, tough red, overspread with a thick bloom; flesh quite pulpy, flavor pleasant but not rich. Vine vigorous, hardy, healthy and productive. Ripens with Concord. Keeps well, possesses qualities which render it desirable in some localities.

CLASS 3. WHITE GRAPES.

Duchess. Bunch medium to large; long shouldered, compact; berries medium, not uniform, some being quite small, form roundish; skin thick generally dotted with small black spots about the size of a pin head; color light green at first, becoming greenish yellow when ripe, fruit almost transparent; flesh tender without pulp, juicy, sweet, crisp, rich and in quality ranks as best. Vine vigorous and productive here. The foliage is said to mildew in some localities. Grown with care it is no doubt a valuable white grape for the amateur and perhaps in favorable locations may be cultivated successfully on a larger scale for market. Ripens early before the Concord.

Empire State. (Rickett's.) Bunch long; berry medium to large, roundish, oval; skin white with a slight tinge of yellow; flesh tender, juicy, sweet and sprightly. Ripens with Concord. Vine vigorous and productive.

Moore's Diamond. (New.) Originated by Jacob Moore. Described as "a pure native, bunch large, compact; berry about the size of Concord; color greenish white with a yellow tinge when fully ripe; flesh juicy and almost without pulp; quality very good. Vine vigorous and productive."

Niagara. Said to be a cross of Concord and Cassady. Bunch medium to large, compact, occasionally shouldered; berry large, roundish, uniform; skin thin but tough, pale green at first, changing to pale yellow when fully

ripe, with a thin whitish bloom; flesh slightly pulpy, tender, sweet. not quite equal to the Concord. Before it is fully matured it has a very foxy odor, which disappears to a great extent, later. Vine remarkably vigorous, healthy and productive; foliage thick and leathery. Ripens with Concord. This variety is no doubt destined to supply the long felt want among white grapes.

Pocklington. A seedling of the Concord. Bunch medium to large, generally shouldered; berry large, roundish, light golden yellow when fully matured; flesh pulpy; juicy of fair quality; vine very hardy, healthy, vigorous and productive; leaves large, tough and downy; ripens after the Concord. It will require favorable seasons and good locations to ripen it satisfactorily in this region.

CURRENTS.

No garden, however small, is complete without at least one variety of Currants. There is no fruit that will stand neglect as well, or that will repay the cultivator more for good, liberal culture and manure. White Hellebore sprinkled over the bushes when the dew is on them will destroy the currant worm,

	Each	Dozen	Hundred
2 year old.....	15c	\$1 25	\$8.00

Black Naples. A large and handsome black currant; quite productive and vigorous.

Cherry. Fruit of large size; bunch rather short; strong grower and very popular.

Fay's Prolific. This new variety promises to be the most valuable red currant yet introduced; color rich red, as large as the Cherry, better flavored, less acid, and five times as prolific.

Red Dutch. An old well-known variety, and everywhere esteemed as a reliable and productive sort; valuable for market.

Victoria. (*Houghton Castle.*) (*Raby Castle.*) One of the best; large in bunch and berry; bright red; productive and a fine grower.

White Grape. The finest white currant; large, sweet and pleasant; very productive.

GOOSEBERRIES.

Plant in a deep, rich soil, and dig in a liberal top-dressing of manure every Spring. To secure fine fruit, regular pruning every year is absolutely necessary. Trim off all suckers, and in the Autumn after the leaves fall, give the bushes a thorough thinning.

	Each.	Dozen.	Hundred.
General List.....	15c	\$1.50	\$ 8.00

Downing. A seedling of Houghton; upright grower, very vigorous and productive; fruit much larger than the Houghton; whitish green flesh, soft, very juicy and good. The best for family use and very profitable for market.

Industry. Very large, dark cherry color with numerous hairs, and of delicious quality. Ellwagner & Barry, the introducers, state they believe it will revolutionize Gooseberry culture in this country, and describe it as unequalled for size, flavor, productiveness and vigorous growth. The introducers have fruited it several years, it proving with them "an immense yielder and showing no signs of mildew." 25c each, \$2.00 per dozen, \$12.00 per hundred.

Red Jacket. The most prolific and most valuable Gooseberry in America ; as large as the largest ; berry smooth. Very hardy. Quality best and foliage best of any Gooseberry known. 25c each, \$2.00 per dozen, \$12.00 per hundred.

Smith's Improved. Raised by Dr. Smith, of Vermont, from seed of the Houghton. The fruit is larger, and plant a stronger and more upright grower than its parent ; light green ; sweet and excellent ; very productive.

RASPBERRIES.

The great improvement in the hardy varieties makes the cultivation of this fine fruit comparatively easy. Any good soil will do, but a light, loamy one is preferable. Plant in rows, five or six feet apart, leaving four feet between the plants ; remove the old ones as soon as the fruit is gone, and do not allow more than three or four new ones to each hill ; pinch the young canes when three or four feet high, and continue pinching in the laterals when a few inches long. Treated in this way they will need no stakes, but will be stout enough to support themselves.

	Each	Dozen.	Hundred.	Thousand.
General List.	10c	50c	\$1.50	\$10.00

Cuthbert. (*Queen of the Market.*) Cane tall and vigorous ; berries large, conical, rich crimson and very handsome ; best quality, and carries well ; very productive.

Cumberland. This new claimant for honors in the Raspberry market has fully sustained the great reputation it made so soon after its introduction. It is, without doubt, the finest black Raspberry ever grown, far exceeding in every respect that old standard, Gregg, which has been a favorite so long. It is the most profitable and desirable market variety, being termed "Business Blackcap" by the introducers, it selling for 10 cents a quart when other varieties brought but 5 to 7 cents. It is of immense size, some specimens measuring a full inch across. Extremely hardy ; it has withstood a temperature of 16 degrees below zero without injury. It is wonderfully productive, of the finest quality, unusual firmness, and ripens about the middle of the season. 75c per dozen, \$2.50 per hundred.

Gregg. Recently introduced from Ohio ; ripening about the same time as Mammoth Cluster, but much larger, more productive, and of finer quality. Promises to supersede all other Black Caps.

Kansas. Probably the most desirable Black Cap in cultivation. Have fruited it two seasons. The berry is very nearly as large as the Gregg, and but two or three days later than Tyler. Fruit jet black, firm and of best quality, a strong grower and immensely productive. Testimonials from all sections where this has been planted place it at the head. We honestly think you will be sorry if you miss planting the Kansas.

Loudon. The best hardy and late red raspberry. It seems to be about the right time to place before our readers anything of importance we may have learned about new kinds of Raspberries during the past season. Among reds, the Cuthbert, introduced about 15 years ago, has generally held first place as a hardy late variety. Trials the past season lead us to hope that a more valuable kind will be found in the **LOUDON**. Plants were sent to us early in May of 1892 by F. W. Loudon, of Wisconsin, and set out here in a rather sandy loam. May 10, Mr. Loudon wrote : The berry is large, color beautiful. It yields 200 bushels to

the acre and may be shipped to New Orleans in good shape." 75c per dozen, \$2.00 per hundred, \$15.00 per thousand.

Miller Red. This new red Raspberry originated in Sussex county, Delaware, and is very popular in that section; fruit about the size of the Cuthbert, and holding its size to the end of the season; color bright red, and does not fade; core very small; the finest and best shipping berry in existence; ripens early; heavy bearer.

Palmer. Very early, immensely productive; hard and thrifty grower. For a very early berry you will make no mistake in planting it.

Souhegan. A variety which promises to be of great value. A seedling of Doolittle. It is large, of good quality, enormously productive, and ripens a week to ten days before the other Black Caps. Very hardy.

BLACKBERRIES.

The cultivation of this very delicious and healthy fruit is attended with so little trouble and expense that every garden, however small, should have at least one dozen plants. For cooking purposes they are unsurpassed, and will yield a dark wine of excellent quality.

Any moderately rich soil will answer for their cultivation, but to avoid a too strong growth and straggling habits, the ends or the shoots must occasionally be pinched in during the growing season, thereby encouraging the plants to form dwarf bushes; being easier to work among them, and at the same time make the plants produce a larger crop and finer berries. An annual dressing with manure will produce an excellent effect on the succeeding crop of fruit.

	Each	Dozen	Hundred
General List	10c	50c	\$2.00

Early Cluster. Claimed to be the earliest large berry, and very productive, ripening between the Early Harvest and Wilson's Early.

Early Harvest. Medium size; very early, hardy and enormously productive.

Erie. One of the very best large new berries; absolutely hardy; coal black; firm and solid; ripens early.

Kittatinny. Large; glossy black; juicy, sweet and excellent; commences to ripen with Wilson's Early and continues for four or five weeks. Hardy, vigorous and productive; good as soon as colored.

Lucretia. This is a trailing blackberry or dewberry; a good grower and productive; fruit large and of good flavor.

Wachusett Thornless. Large; very fine quality; canes of strong growth, with very few thorns; requires a rich, heavy soil and good culture; hardy; ripens with Kittatinny.

Wilson's Early. A very popular market variety on account of its earliness, and ripening its whole crop within two weeks. Liable to be injured by the Winter north of Maryland.

Wilson Jr. A seedling of Wilson's Early claimed to be earlier and better than that well-known variety.

STRAWBERRIES.

In preparing the soil for Strawberries, the most essential point to be observed, is to have the ground trenched deeply; and moderately rich soil is sufficient for the healthy growth of the plants. The earlier they are planted in the Spring the better. Keep the roots from being dried by the wind or sun. To produce large berries, the runners must be

pinched off, thereby throwing the strength of the plant into the fruit, a great desideratum.

Those marked (P.) have pistillate or imperfect flowers and must be planted near perfect flowering kinds, in order that the flowers may be fertilized and to obtain fruit.

	Dozen	Hundred	Thousand
General List	25c	75c	\$4.00

Bubach, No. 5. (P.) This is decidedly, all things considered, the best large strawberry. Unfortunately it does not stand shipping; but for near by market and home use it has paid enormously (over \$500 per acre.) It does well on all kinds of soil; being an imperfect flower, it only reaches perfection when fertilized with some good stamen kind, as Jessie. Like all strawberries, it requires a liberal amount of manure; the plant is a strong grower, with only a limited number of runners; dark green foliage, and does not blight or rust; enormously productive; the fruit is large, light red, handsome and delicious. Early.

Bismarch. A magnificent self-fertilizing Strawberry of wonderfully large size and of the finest quality. It is a beautiful, glossy red, and of good shape. The plant is a most vigorous grower, and such an abundant bearer that the originator said his patch "looked just as if some one had thrown berries over the ground with a shovel."

Gandy. A new very late kind, the fruit is uniformly large, bright red, firm and of first quality; very valuable as a shipper; requires high cultivation to bring it to perfection, is valuable as a fertilizer to use with other kinds, making the latter more faithful; the best late variety.

Glen Mary. Of Pennsylvania origin, and of great value. Of very great size, a quart measure holding but 12 berries upon a recent trial.

Clyde. One of the most wonderful berries ever grown. Hale says: "Clyde is the one great business Strawberry basket-filler, money-catcher, debt-destroyer, and family provider. Plant the Clyde, make money, grow fat and be happy;" and he knows. One great feature about it is its adaptability to all parts of the country; and it everywhere produces wonderful crops of large, bright scarlet, firm berries, which stand shipping splendidly and bring the best prices in market. The foliage is light green and very vigorous and handsome.

Lady Thompson. Large, immensely productive, and has the healthiest kind of foliage. A wonderful berry in every respect.

Michel's Early. Origin Arkansas. Six to ten days earlier than Crescent; a perfect flower and a good fertilizer for other sorts; the berry is large and firm, and of the finest flavor; one of the very best for early market; especially adapted to the South; the plant is a strong, hardy grower, and free from rust or blight.

Marshall. Very large; of a rich dark crimson to the core; fine flesh, exquisite flavor; remarkably fine keeper and carrier.

Parker Earle. Sets an immense crop but does not bring it to maturity here. It does well in some sections, we find on low springy, rich soil it does much better and is becoming more of a favorite. Some recommend it for its second crop of berries, being more valuable and commanding a higher price. Perfect blossom.

Sharpless' Seedling. Raised by J. K. Sharpless, Pennsylvania. At present the most popular strawberry in cultivation. The flesh is solid, sweet, rich and juicy, and of a luscious flavor. The fruit is monstrous—larger than Monarch of the West or any other variety. Most berries are of good shape, though some are compressed or cockscomb-shape. Very productive.

ESCULENT ROOTS.

ASPARAGUS.

	Dozen	Hundred	Thousand
General List, 2 Year Old.....	25c	75c	\$4.00

Gonover's Colossal. A standard kind of first quality; tender and high flavor; often ready to cut the second year after planting.

Barr's Mammoth. Originated near Philadelphia. The largest of all, and with this great merit, it is very early and quite tender; delicious; light colored; the yield is simply enormous; decidedly the best asparagus for all purposes introduced. New.

Palmetto. Southern origin; new. Ten days earlier than other kinds; valuable for home or market; largest, tender; very regular growth; one of the best.

RHUBARB, OR PIE PLANT.

This very desirable vegetable comes early in the Spring. The large stems of the leaves are used for pie-making and stewing; it is also valuable for medicinal purposes; we keep the best varieties.

Linnaeus and *Victoria*,—\$1.00 per dozen.

HEDGE PLANTS.

American Arbor-Vitae, Hemlock Spruce, Norway Spruce. These three well known and popular varieties make a beautiful evergreen hedge.

Osage Orange. (*Maclura Aurantifolia*.) A native tree, of medium size and splendid habit; leaves bright, shiny green; the fruit resembles an orange; extensively used for hedges. \$4 per 1000.

California Privet. (*L. Ovalifolium*.) A vigorous, hardy variety, of fine habit and foliage nearly evergreen; grows well in almost every soil; ornamental and one of the best hedge plants. \$4.00 per hundred, \$30.00 per thousand.

ORNAMENTAL DEPARTMENT.

In issuing this new edition of our Descriptive Catalogue of Ornamental Trees, Evergreens, etc., we may say the increasing demand for this class of stock has induced us to make this branch a more prominent feature of our establishment, and to this end we have been steadily working for years, carefully selecting the best and most desirable sorts out of the great mass that has been brought to the notice of the public. That there should be many very good things, and also very poor ones, in these vast collections is a fact beyond question. For the supply of the amateur, and those whose plantings are to embrace a large collection for variety's sake, it is very proper that they should be supplied; but our purpose is chiefly to furnish material to those who select for true merit, who want trees that will do the most good and give the best satisfaction. It should be kept in mind that, with ornamentals, as with fruit trees, there are some that will do well in one place that will fail in another, so that care should be taken, in making up planting lists, to select such only as are known to succeed in the particular locality in which they are to be planted. We want trees that will not only show well in the earlier stages of their growth, but those that will maintain a good form and pleasing habit as they grow older; in fact, we should look more to the character of the tree when developed, than to its appearance when young.

TRANSPLANTING AND CULTIVATION.

The same advice concerning transplanting and cultivation, given in our Fruit Catalogue, applies to this department; but as it is often impossible to cultivate the ground in which shade trees are planted, it will be the more necessary to mulch them well, and not let the grass grow close around the stem of the tree.

Evergreens should be carefully planted in good, deep, rich soil, and well mulched. When this is done, watering will seldom be necessary; but when, in case of extreme drouth, it may be required, it should be thoroughly done, so as to reach well down to the roots. Very much watering before the leaves expand is a decided injury; but let there be just enough to keep the earth moist about the roots, not soaking wet, or it may cause the roots to decay.

The branches should always be shortened back, at the time of planting, in proportion to the loss of roots sustained by the tree in moving.

Those contemplating planting trees should bear in mind that the value and beauty of a tree or plant is dependent upon the thriftiness and symmetry rather than its height.

DECIDUOUS TREES.

ASH, European, (*Fraxinus excelsior*.) A lofty tree, of rapid growth. 75c each, \$8 per dozen.

White American, (*F. Americana*.) A native tree of large size, pale green foliage; one of the best of the family. 75c each, \$8 per dozen.

BEECH, American, (*Fagus ferruginea*.) One of the grandest trees of our forest, hardy and comparatively free from insect depredations; well deserving of more extensive planting.

Purple-Leaved, (*Fagus sylvatica purpurea*.) Foliage deep purple in the spring, but under our hot sun and in dry seasons it loses much of its color; for the Northern States it is a very desirable tree. 75c each, \$8 per dozen.

European Beech, (*Fagus sylvatica*.) A beautiful tree, attaining a height of sixty feet or more. 75c each, \$8 per dozen.

BIRCH, European White Birch, (*Betula alba*.) A medium sized tree, quite erect when young, but after a few years the branches assume an elegant, drooping habit, which renders the tree very effective on the landscape. \$1 each, \$10 per dozen.

CATALPA, *bignoniodes*. A native of the Southern States; a rapid growing tree, with large heart-shaped leaves and large spikes of white and purple flowers. 75c each, \$8 per dozen.

ELM, English, (*Ulmus campestris*.) A native of Europe; a noble, rapid growing tree, forming a dense head; a desirable tree for streets, avenues, etc. 75c each, \$8 per dozen.

American or White, (*U. Americana*.) A native tree of large size, with spreading head and graceful, drooping branches. Of all trees no other, perhaps, unites in the same degree; majesty and beauty, grace and grandeur, as this one does. It flourishes in all parts of the country, and deserves to be more generally planted.

FRINGE-TREE, White Fringe, (*Chionanthus Virginica*.) A small native tree, white ash-like leaves and dropping racemes of pure white flowers, resembling an elegant fringe. 75c each, \$8 per dozen.

HORSE-CHESTNUT, Common White Flowering, (*Æsculus hippocastanum*.) A handsomely-formed tree, with very attractive flowers;

succeeds well in the Northern States and in the elevated portions of the Southern States; but in many places South its foliage burns under the hot sun. 75c each, \$8 per dozen.

Red Flowered, (*Æ. rubicunda*.) A superb tree in both foliage and flowers; the foliage is darker green than the white, and the flowers showy red, coming later. Very desirable.

LARCH, *European*, (*Larix Europæus*.) A beautiful rapid growing pyramidal tree, with all the characteristics of an evergreen, except that it drops its foliage in the autumn; very desirable. 75c each, \$8 per dozen.

LABURNUM, *Golden Chain*, (*Cytisus Laburnum*.) A very ornamental small tree, a native of Europe, with smooth; shining foliage, bearing a profusion of drooping racemes of yellow flowers. 75c each, \$8 per dozen.

LINDEN, *American Basswood*, (*Tilia Americana*.) A large native, rapid growing tree, with large leaves and fragrant flowers; fine for street or lawn planting; is becoming very popular, and deservedly so, as it is a fine tree. 75c each, \$8 per dozen.

European Linden, (*Tilia Europæa*.) A fine pyramidal tree, more compact in its habit than the above, but does not attain as large a size; a very popular tree. 75c each, \$8 per dozen.

MAPLE, *Silver-Leaved*, (*Acer dasycarpum*.) A hardy, rapid growing native tree, attaining a large size; valuable for producing a quick shade; fine for street and park planting, for which purpose it is planted more largely than any other tree. 60c each, \$7 per dozen.

Norway Maple, (*A. Platanoides*.) One of the most beautiful and desirable trees known; foliage broad, deep green; shining, its compact habit, stout and vigorous growth render it one of the most valuable trees for street or lawn planting. 75c each, \$9 per dozen.

Sugar Maple, (*A. saccharinum*.) A well known native tree, of stately growth, fine form and foliage; very desirable as an ornamental and shade tree. 75c each, \$8 per dozen.

Sycamore Maple, (*A. Pseudo platanus*.) A European species, of moderate size; leaves large, dark green. 75c each, \$8 per dozen.

Schwedler's Maple. This beautiful maple of recent introduction is attracting considerable attention; it is of the Norma family, and of about the same habit of growth, its handsome purplish crimson leaves in May and June, changing to a bronze as they mature, are much admired. 75c each \$8 per dozen,

Cut Leaved Maple, (*M. macrophylla*.) A tree of small size; round headed, compact; foliage large, deeply cut. 75c each, \$8 per dozen.

MAGNOLIA, *Cucumber Tree*, (*M. acuminata*.) A beautiful pyramidal tree, attaining a height of seventy or eighty feet; growth very rapid and upright; flowers greenish yellow.

Great-Leaved Magnolia, (*M. macrophylla*.) A tree of medium size, leaves from two to three feet long; flowers eight to ten inches in diameter; pure white, very fragrant. 75c each, \$8 per dozen.

Umbrella-Tree, (*M. tripetala*.) A small sized tree, of rapid growth, with immense leaves: flowers creamy white, four or six inches in diameter.

Grandiflora. This magnificent Southern evergreen may be called the Queen of the Magnolias. It is really a grand tree, but, unfor-

tunately, too slender to stand the winters well north of the Potomac, and even the climate along the mountains of Virginia is rather too severe for it to do well; but east of Richmond and south of the James River it flourishes finely. The tree is of rapid and handsome growth; leaves eight to ten inches long, which are retained the whole year; flowers large, white and very fragrant. 75c each, \$8 per dozen.

Soulange's Hybrid Chinese, (*M. Soulangeana*.) Shrubby and branchy when young, becoming a fair-sized tree; flowers white and purple, three to five inches in diameter; blooms late; handsome and hardy. 75c each, \$8 per dozen.

Slender-Growing Magnolia, (*M. gracilis*.) A small tree, or large shrub; flowers cup-shaped, dark purple. 75c each, \$8 per dozen.

MOUNTAIN ASH, *European*, (*Pyrus aucuparia*.) A small tree, with dense and regular head. In the Northern States it is covered from July till winter with great clusters of bright scarlet berries, but here and Southward it drops them much earlier, therefore losing much of its beauty. 75c each, \$8 per dozen.

Carolina Poplar, or Cottonwood, (*P. Caroliniana*.) A large sized tree, of remarkably rapid growth, becoming popular with those who want shade in the shortest possible time. 60c each, \$6 per dozen.

SWEET GUM, (*Liquidambar styraciflua*) A fine native ornamental tree, the foliage resembling that of the Maple; corky bark; leaves changing to deep crimson in the autumn. \$1 each, \$10 per dozen.

WILLOW, *Golden Willow*, (*Salix vitellina aurantiaca*.) A handsome tree, particularly conspicuous in winter on account of its yellow bark. 75c each, \$8 per dozen.

WEeping TREES.

ASH. *Weeping Ash*. (*Fraxinus excelsior pendula*.) A tree of medium size, with stiff, twisted; pendulous branches \$1.00 each.

BEECH. *Weeping Beech*. (*Fagus pendula*.) A graceful, elegant tree, with branches more or less pendant, \$1.00 each.

BIRCH. *Weeping Cut-Leaved Birch*. (*Betula alba*.) A charming tree in the Northern states, but does not show so much beauty South, except in very favorable locations; it is of very graceful, drooping habit, silvery white bark and delicate cut foliage. \$1.00 each.

ELM. *Camperdown Weeping Elm*. (*Ulmus var. Camperdown pendula*.) A drooping and picturesque variety of the Scotch Elm; foliage large, dark green, covering the tree with a luxuriant mass of verdure. \$1.00 each.

LINDEN. *White Leaved Weeping Linden*. (*Tilia alba pendula*.) A fine lawn tree; with very graceful, drooping branches and downy white leaves; a rapid grower, and quite hardy. \$1.00 each.

MOUNTAIN ASH. *Weeping Mountain Ash*. (*Sorbus Aucuparia pendula*.) The branches of this distinct variety are of a straggling pendant habit; a rapid grower. \$1.00 each.

WILLOW. *Common Weeping Willow*. (*Salix Babylonica*.) A native of Asia. This is one of the most graceful and beautiful of the weeping trees; it is of rapid growth, attaining a very large size, showing its greatest beauty in damp or moist soils, but grows fairly well in any good soil. \$1.00 each.

Kilmarnock Willow (*S. cuprea pendula*.) A variety of the Goat

Willow, making a very pretty tree when budded six or eight feet high; forming a complete umbrella head, the branches and foliage being very dense, unique in form. \$1.00 each.

New American Weeping Willow. (*S. purpurea pendula.*) A small, slender-branched species from Europe; often known as the Fountain Willow. \$1.00 each.

EVERGREENS.

ARBOR-VITAE. *American.* (*Thuja Occidentalis.*) Sometimes called White Cedar, a well known native species, of great value, forming an upright, conical tree of medium size; especially valuable for screens and hedges. 50c each.

Chinese. (*Biota Orientalis.*) From China and Japan; a small tree with erect branches and dense, flat, light green foliage. 50c each.

Chinese Golden (*B. aurea.*) The most elegant and charming, and justly becoming the most popular of the arbor-vitae; the beautiful golden tint of its foliage and the compact and regular outline of its habit render it unusually attractive. 75c each.

Globe-Headed. (*T. globosa.*) Originated at Philadelphia; forms a dense, round head; dwarfish in habit; desirable. 50c each.

Hovey's Golden. (*T. Hoveyi.*) Of dwarfish habit; globular in outline; foliage of a light yellowish green hue; hardy and fine. 75c each.

Nordman's Silver Fir. (*P. Nordmaning.*) A rapid grower, regular in outline, foliage, massive dark green; one of the finest of the Silver Firs. \$2.50 each.

CEDAR. *Deodar Cedar.* (*Cedars Deodara.*) A native of the Himalayas, being one of the most graceful and elegant of all the European trees; growth rapid, branches drooping; foliage light glaucous green; not entirely hardy north of Philadelphia. \$1.00 each.

CYPRESS, *Lawson's Cypress,* (*Cypressns Lawsoniana.*) From California; a large, graceful tree, having elegant, drooping branches; leaves dark; glossy green, tinged with a glaucous hue; one of the finest. \$1.50 each.

HOLLY, (*Ilex.*) A well-known evergreen tree, with shiny, thorny leaves, somewhat resembling the oak in form; produces ornamental red berries, which hang on the tree through the winter. 75c each.

JUNIPER, *Irish Juniper,* (*Juniperns Hibernica.*) A distinct and beautiful variety, of very erect, dense, conical outline, resembling a pillar of green. 75c each.

PINE, *Austrian,* (*Pinns Aastriaca*) A rapid growing species, with long, stiff, dark green leaves. 75c each.

SPRUCE, *Norway Spruce,* (*Abies excelsa.*) A European species. of rapid, elegant and lofty growth, and when it attains to the height of 15 or 20 feet the branches assume a graceful, drooping habit; this is one of the handsomest as well as the most popular evergreen trees; very hardy. 75c each.

White Spruce, (*A. alba.*) A very pretty tree; attains a height of 40 to 50 feet; compact in growth; conical in form, with soft, light green foliage; very hardy; desirable. 75c each.

Hemlock, (*A. Canadensis*) One of the hardiest and most handsome trees; branches drooping; foliage delicate, retaining its color well through the winter; should be in every collection, however small; it also makes a highly ornamental hedge. 75c each.

Enemies of Fruit Trees and Plants

The insect and fungous enemies of the orchard and fruit garden increase so rapidly and are so destructive that inquiries concerning the best methods of combating them and securing good fruit through us from every side. In the summary given below we have endeavored to answer these questions.

FUNGOUS DISEASES.

An insect is something tangible. Usually it can be seen, seized in some manner, and promptly dealt with; but the fungous diseases of trees and plants, commonly known as mildew, rust, scab, smut, blight, etc., have long been baffling because their real nature was unknown. Spraying is now the most approved method of preventing the majority of these diseases, and the formulas for mixtures and solutions that have been found most successful are here given. Spraying machines for applying these solutions are sold in all the markets.

FOR FUNGOUS DISEASES OF THE APPLE AND PEAR the following solutions are recommended:

FORMULA 1. Paris green. (*Poisonous.*) Use one-fourth pound of Paris green to 50 gallons of water. Keep well stirred.

FORMULA 2. London purple. (*Poisonous*) Use one-fourth pound of London purple to 50 gallons of water. Keep well stirred. This formula is perhaps more liable to injure the foliage than Paris green.

FORMULA 3. Kerosene emulsion. Kerosene emulsion is made by adding two parts of kerosene to one part of a solution made by dissolving half a pound of hard soap in one gallon of boiling water, and churning the mixture through a force-pump with a rather small nozzle until the whole forms a creamy mass which will thicken into a jelly-like substance on cooling. The soap solution should be hot when the kerosene is added, but of course must not be near a fire. The emulsion thus made is to be diluted before using with nine parts of cold water.

FORMULA 4. Bordeaux mixture.

Sulphate of copper (blue vitrol, blue stone)..... 6 lbs.

Quick lime..... 5 lbs.

Water..... 22 gals.

Dissolve the sulphate of copper in two gallons of hot water to hasten the solution. Dilute this solution with fourteen gallons of water. Slake the lime which must be fresh (*i.e.*, not partly air-slaked,) slowly, with six gallons of water, stirring the mixture while so doing to a smooth paste. After this is slightly cooled, pour it slowly into the copper solution, stirring the whole rapidly at the same time. For use this mixture must be stirred and strained through fine brass or copper gauze.

FORMULA 5. Ammonical carbonate of copper.

Carbonate of copper..... 3 oz.

Commercial ammonia (22°)..... 1 qt.

Water..... 22 gals.

Add the ammonia to the carbonate, and when dissolved dilute to twenty-two gallons with water, forming a clear solution

APPLE AND PEAR BLIGHT. Cut off and burn all affected parts as soon as noticed.

APPLE-SCAB. Spray with Formula 5 just as the leaves expand, and repeat three or four times through the season.

BLACK-ROT IN GRAPES. (1) Spray with Bordeaux mixture, Formula 4, beginning early in the season, and repeating every two weeks as long as danger lasts; or during the latter half of the season use Formula 5. (2) Manila paper bags securely pinned over the bunches early in the season are a preventative of the rot, and also a protection against birds, wasps, etc.

POWDERY MILDEW IN GRAPES. Dust the vines with powdered sulphur two or three times during the season.

INSECTS.

APPLE TREE BORERS. The Round-headed Apple-tree Borer (*Saperda candida*) is a grub hatched from the egg of a brownish beetle with two longitudinal white stripes along its back, which deposits its eggs early in summer near the surface of the ground, where the bark is tender. As soon as hatched; the grub gnaws its way into the inner bark or sapwood, and continues to girdle and perforate the trunk during three summers, coming out of the tree at the end of three years in the butterfly form, again to continue the propagation of the species. There are a number of remedies for this pest: (1) Examine the tree, and cut the borers out with the point of a

knife, or kill them by thrusting a flexible wire as far as possible into the holes. The place where the larva enters can usually be detected by the sawdust like castings that are pushed out. (2) To prevent the parent moth from laying eggs, apply to trunk of tree the last of April or early in May, and again about a month later, a solution made by mixing one quart of soft soap with two gallons of water heated to boiling, and then add a pint of crude carbolic acid. Apply with a scrub-brush or cloth.

PEACH BORERS. (*Ageria exitiosa*.) These grubs hatch from eggs deposited (usually during May, but also at different times until last of September) by a slender dark-blue four-winged moth. They become small white borers, penetrating and devouring the bark and sapwood, emerging again the next Spring in the winged form, and depositing eggs for another generation. The remedies are: (1) Cut out the borers as recommended under apple-tree borers. (2) Earth up (about one foot high) around the trunks of the tree in early Spring, and level down in October; and when leveling down, if any grubs have entered trace and kill them. (3) If you don't earth up, apply the solution recommended for painting the trunks of apple-trees for borers.

All borers that infest nut-trees, shade-trees and grape-vines should be hunted out and killed.

CATERPILLARS. Of these the most destructive is *Clisiocampa Americana*. Every one is familiar with web-like nests which they form on the twigs and in the forks of the branches in the Spring. Destroy these nests as soon as they appear in the Spring. Do this work in the early morning, on small trees stripping the nests off by hand and crushing them under foot; on large trees, use a pole with a fork on the end, and by twisting in the nest, pull down and destroy. Or apply Formula 1 or 2, given above, just at the time you spray for the codlin-moth, as the same application destroys both.

THE CANKER-WORM. (*Anisopteryx vernata*.) The sluggish, wingless female moth rises out of the ground very early in Spring, and slowly ascends the trunk of the tree, laying eggs in clusters on the bark, to which they are secured by a grayish varnish. These usually hatch about the time the young leaves begin to grow, when the little worms at once begin to feed on the foliage. Encircle the trunk of the tree with bands of canvas or heavy paper four or five inches wide, which have been thickly smeared with tar or the residuum of kerosene oil, thus trapping the female moth. Or use formula 1 or 2, at the same time and as recommended for codlin-moth.

THE GRAPE-VINE-FLA-BEETLE. (*Heltica chalybea*.) Dust the plants with a mixture of one part of Paris green or London purple to fifty parts of flour, land-plaster or leached ashes; one application is usually sufficient.

THE GRAPE LEAF-HOPPER. (*Erythroneura vitis*.) Pass between the rows at night with a torch, shaking the vines to start the insects. They will fly to the light and be destroyed.

PLANT LICE. Spray with kerosene emulsion (Formula 3.)

SCOLYTHUS RUGULOSUS. A minute insect that punctures the upper base of the spurs of the peach. We can only suggest the burning of all affected trees in June as soon as noticed.

APPLE WORM OR CODLIN-MOTH. (*Corpocapsa pomonella*.) The parent moth of this insect deposits its eggs in Spring in the blossom end of the young apple, before the latter has turned down on its stem. From this egg there hatches a small worm that eats its way towards the core, feeding and increasing in size as the apple develops, causing the fruit to drop prematurely. Apply Formula 1 or 2, just after the blossoms have fallen and before the young apple has turned down on the stem; and in case there is a washing rain soon afterwards, repeat the application. Apply by means of a force-pump and spray-nozzle, throwing the liquid above the tree so that it will settle in a fine mist.

CURCULIO. (*Conotrachelus nennphur*.) The greatest enemy of the plum and some other stone fruits, also affects the apple and other kinds. Jar the trees and catch the insects upon sheets and burn or otherwise destroy them. Another remedy is to spray the plum trees soon after blossoms fall with Formula 1 or 2, repeating the application once or twice at intervals of ten days. On plums of the Wild Goose class, or on peach trees, use a weaker solution, not more than one ounce to fifteen gallons of water, always keeping the mixture well stirred.

List of Fruit Trees in Stock

FEBRUARY 16, 1904.

APPLE TREES.

Height—6 to 7 ft.; 5 to 6 ft.; 4 to 5 ft.

- 11,725 York Imperial
- 5,520 Ben Davis
- 2,660 Man Black Twig
- 2,091 Jonathan
- 2,053 Grimes Golden
- 2,000 Winesap
- 640 Gano
- 491 York Stripe
- 385 Baldwin
- 320 Yellow Transparent
- 309 Stayman's Winesap
- 175 Stark
- 112 N. W. Greening
- 103 Early Harvest
- 100 Rambo Summer
- 75 Smith Cider
- 73 Paradise W. S.
- 72 Smokehouse
- 72 Gravenstein
- 57 Lankford Seedling
- 53 Red Astrachan
- 50 Fallawater
- 50 Dominie
- 50 Lawyer
- 45 R. I. Greening
- 43 Rambo Winter
- 30 Northern Spy
- 27 Nero
- 25 English Redstreak
- 25 Maiden's Blush
- 20 Rome Beauty
- 11 Missouri Pippin
- 33 Transcendant Crab
- 21 Hyslop

PEACH TREES

Height—5 to 6 ft.; 4 to 5 ft.; 3 to 4 ft.

- 2,787 B Smock
- 415 B. L. October
- 416 Carman
- 1,294 Chair's Choice
- 1,407 Champion
- 150 Christiana
- 270 Crawford's Early
- 1,443 Crawford's Late
- 100 Connetts S. Early
- 97 Early York
- 86 Early Rivers
- 2,866 Elberta
- 1,271 Foxes Seedling
- 325 Fitzgarrel
- 174 Globe
- 162 Greensboro
- 1,158 Geary's Hold On
- 548 Heath Cling
- 129 Leevy Late
- 1,295 Mountain Rose
- 310 McColister Mammoth
- 947 Old Mixon
- 200 Red Cheek Melocoton
- 677 Reeves Favorite
- 1,631 Stump the World
- 2,900 Salway
- 116 Susquehanna
- 193 Stephens Rareripe
- 150 Triumph
- 446 Wonderful

1,800 Keiffer Pears, different sizes.

An assortment of Pear, Plum, Cherry, Quince, Apricot and Nut Bearing Trees. Small Fruit Trees of all kinds. Write for Catalogue. Prompt attention will be given to all inquiries. Special prices given on large orders.

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— MARYLAND —

STATE HORTICULTURAL DEPARTMENT.

DEPARTMENTS OF ENTOMOLOGY
AND
VEGETABLE PATHOLOGY.

MARYLAND AGRICULTURAL COLLEGE
AND EXPERIMENT STATION.

R. W. SILVESTER,

PRESIDENT AGRICULTURAL COLLEGE.

PROF. A. L. QUAINANCE,

STATE ENTOMOLOGIST.

PROF. J. B. S. NORTON,

STATE PATHOLOGIST.

CERTIFICATE OF NURSERY INSPECTION.

No. 13.

To Whom It May Concern:

THIS IS TO CERTIFY, That on the 23rd day of August, 1902, we examined the Nursery Stock of J. A. Ramsburg, growing in his nurseries at Walkersville, County of Frederick, State of Maryland, in accordance with the laws of Maryland, 1898, Chapter 289, Section 58, and that said nurseries and premises are apparently free, so far as can be determined by inspection, from the San Jose Scale, Peach Yellows, Pear Blight and other dangerously injurious insect pests and plant diseases.

This certificate is invalid after August 1st., 1903, and does not include nursery stock not grown within this State, unless such stock is previously covered by certificate and accepted by the State Entomologist and State Pathologist.

A. L. QUAINANCE,

State Entomologist.

J. B. S. NORTON,

State Pathologist.

College Park, Md., August 26, 1902.